

IN THE CLAIMS:

Please cancel claims 5-6 and 14 without prejudice or disclaimer, and amend claims 1-4 and 7-13, and add new claims 17-19 as follows:

1. (Currently Amended) A liquid crystal display device comprising:
- a liquid crystal display element with a plurality of drain signal lines;
 - a plurality of driving circuits including a first driving circuit and a second driving circuit, each of the driving circuits having a plurality of output terminals; and
 - a display control device transmitting display data including an ineffective datum alternately to the plurality of driving circuits one of the output terminals of the first driving circuit and to one of the output terminals of the second driving circuit which is arranged next to the first driving circuit,
- wherein at least one of said first and second driving circuits has at least one output terminal being not connected to the drain signal lines and each of the remaining output terminals being connected to one of the drain signal lines, and
- wherein the display control device transmits to said output terminal being not connected to the drain lines a display datum having a same level as that of a an effective display datum being transmitted prior or subsequently to an output terminal being connected to one of the drain signal lines prior to the ineffective display datum thereby instead of the ineffective display datum during a period when the ineffective display datum should be transmitted thereby.
2. (Currently Amended) A ~~liquid crystal~~ display device comprising:
- ~~a liquid crystal~~ display element with a plurality of drain signal lines;
 - a plurality of driving circuits including a first driving circuit and a second driving circuit, each of the driving circuits having a plurality of output terminals; and
 - a display control device transmitting display data including an ineffective datum alternately to the plurality of driving circuits one of the output terminals of the first driving circuit and to one of the output terminals of the second driving circuit which is arranged next to the first driving circuit,
- wherein at least one said first and second driving circuits has at least one output terminal being not connected to the drain signal lines and each of the remaining output

terminals being connected to one of the drain signal lines, and

wherein the display control device transmits to said output terminal being not connected to the drain lines a display datum having a same level as that of a an effective display datum being transmitted prior or subsequently to an output terminal being connected to one of the drain signal lines ~~subsequently to the ineffective display datum thereby instead of the ineffective display datum during a period when the ineffective display datum should be transmitted thereby.~~

3. (Currently Amended) A liquid crystal display device comprising:

a liquid crystal display element with a plurality of drain signal lines;

a plurality of driving circuits including at least one odd numbered driving circuit and at least one even numbered driving circuit, each of the driving circuits having a plurality of output terminals; and

a display control device transmitting display data ~~[[for]]~~ alternately to one of the output terminals of said odd numbered driving circuit ~~ones of the plurality of driving circuits and display data for to one of the output terminals of said even numbered driving circuit which is paired with and arranged next to said odd numbered driving circuit~~ ones thereof alternately thereto,

wherein at least one of said numbered driving circuits has at least one output terminal being not connected to the drain signal lines and each of the remaining output terminals being connected to one of the drain signal lines, and

wherein the display control device transmits to said output terminal being not connected to the drain lines a display datum having a same level as that of a an effective display datum ~~for the odd numbered one of the plurality of driving circuits being transmitted prior or subsequently to an output terminal being connected to one of the drain signal lines prior to the ineffective display datum to be inputted to an at least one of the even numbered ones thereof instead of the ineffective display datum during a period when the ineffective display datum should be transmitted to the at least one of the even numbered ones thereof.~~

4. (Currently Amended) A liquid crystal display device comprising:

a liquid crystal display element with a plurality of drain signal lines;

a plurality of driving circuits including at least one odd numbered driving circuit and at least one even numbered driving circuit, each of the driving circuits having a plurality of output terminals; and

a display control device transmitting display data ~~[[for]] alternately to one of the output terminals of said odd numbered driving circuit ones of the plurality of driving circuits and display data for~~ to one of the output terminals of said even numbered driving circuit which is paired with and arranged next to said odd numbered driving circuit ones thereof alternately thereto,

wherein at least one of said numbered driving circuits has at least one output terminal being not connected to the drain signal lines and each of the remaining output terminals being connected to one of the drain signal lines, and

wherein the display control device transmits to said output terminal being not connected to the drain lines a display datum having a same level as that of a an effective display datum for the even numbered one of the plurality of driving circuits being transmitted prior or subsequently to an output terminal being connected to one of the drain signal lines subsequently to the ineffective display datum to be inputted to an at least one of the odd numbered ones thereof instead of the ineffective display datum during a period when the ineffective display datum should be transmitted to the at least one of the even numbered ones thereof.

5-6. (Cancelled)

7. (Currently Amended) A liquid crystal display device comprising:

a liquid crystal display element with a plurality of drain signal lines;

a plurality of driving circuits including at least one odd numbered driving circuit and at least one even numbered driving circuit, each of the driving circuits having a plurality of output terminals; and

a display control device transmitting display data ~~[[for]] alternately to one of the output terminals of said odd numbered driving circuit ones of the plurality of driving circuits and display data for~~ to one of the output terminals of said even numbered driving circuit which is paired with and arranged next to said odd numbered driving circuit ones thereof alternately thereto,

wherein at least one of said numbered driving circuits has at least one output terminal being not connected to the drain signal lines and each of the remaining output terminals being connected to one of the drain signal lines,

wherein the display control device has a first storing means for storing display data for said [[the]] odd numbered driving circuit ~~ones of the plurality of driving circuits~~ which are inputted externally from an outside of the liquid crystal display device and a second storing means for storing display data for said [[the]] even numbered driving circuit ~~ones of the plurality of driving circuits~~ which are inputted externally from an outside of the liquid crystal display device,

wherein the display control device reads out the display data from the first storing means and the second storing means alternately, and transmits them to transmit to the plurality of driving circuits said output terminals being connected to one of the drain signal lines, and

wherein before transmitting a display datum to said output terminal being not connected to the drain signal lines, the display control device reads out from one of said first and second storing means a display datum to be transmitted immediately prior or subsequently to transmitting said display datum to said output terminal being not connected to the drain signal lines, and then repeatedly transmits said display datum to said output terminal being not connected to the drain signal lines and an output terminal being connected to one of the drain signal lines and scheduled to receive said display datum immediately prior or subsequently to the transmitting of said display datum to said output terminal being not connected to the drain signal lines transmits an effective display datum for the odd numbered thereof being transmitted prior to an ineffective display datum to be inputted to an at least one of the even numbered ones thereof instead of the ineffective display datum during a period when the ineffective display datum should be transmitted to the at least one of the even numbered ones thereof.

8. (Currently Amended) A liquid crystal display device according to claim 7, wherein the display control device detects a timing for transmitting ~~the ineffective~~ a display datum to be transmitted to the output terminal being not connected to the drain lines and transmits [[the]] a effective display datum being read out from either of the first and second storing means as the ineffective display datum to be transmitted to the output

terminal being not connected to the drain lines.


9. (Currently Amended) A liquid crystal display device according to claim 7, wherein the display control device stores ~~the effective in the second storing means~~ a display datum to be transmitted to an output terminal of said ~~for the~~ odd numbered driving circuit and being not connected to the drain lines ~~situated before the ineffective display datum is transmitted to the output terminal being not connected to the drain lines in the second storing means, when a display datum to be stored in the second storing means is ineffective, and~~

the display control device stores in the first storing means a display datum to be transmitted to an output terminal of said even numbered driving circuit and being not connected to the drain lines before the display datum is transmitted to the output terminal being not connected to the drain lines.

10. (Currently Amended) A liquid crystal display device comprising:

a liquid crystal display element with a plurality of drain signal lines;

a plurality of driving circuits including at least one odd numbered driving circuit and at least one even numbered driving circuit, each of the driving circuits having a plurality of output terminals; and

 a display control device transmitting display data ~~[[for]] alternately to one of the output terminals of said odd numbered driving circuit ones of the plurality of driving circuits and display data for~~ to one of the output terminals of said even numbered driving circuit which is paired with and arranged next to said odd numbered driving circuit ones thereof alternately thereto,

wherein at least one of said numbered driving circuits has at least one output terminal being not connected to the drain signal lines and each of the remaining output terminals being connected to one of the drain signal lines,

wherein the display control device has a first storing means for storing display data for said ~~[[the]] odd numbered driving circuit ones of the plurality of driving circuits~~ which are inputted externally from an outside of the liquid crystal display device and a second storing means for storing display data for said ~~[[the]] even numbered driving circuit ones of the plurality of driving circuits~~ which are inputted externally from an

outside of the liquid crystal display device,

wherein the display control device reads out the display data from the first storing means and the second storing means alternately, ~~and transmits them~~ to transmit to the plurality of driving circuits said output terminals being connected to one of the drain signal lines, and

wherein before transmitting a display datum to said output terminal being not connected to the drain signal lines, the display control device reads out from one of said first and second storing means a display datum to be transmitted immediately prior or subsequently to transmitting said display datum to said output terminal being not connected to the drain signal lines, and then repeatedly transmits said display datum to said output terminal being not connected to the drain signal lines and an output terminal being connected to one of the drain signal lines and scheduled to receive said display datum immediately prior or subsequently to the transmitting of said display datum to said output terminal being not connected to the drain signal lines transmits an effective display datum for the odd numbered thereof being transmitted subsequently to an ineffective display datum to be inputted to an at least one of the even numbered ones thereof instead of the ineffective display datum during a period when the ineffective display datum should be transmitted to the at least one of the even numbered ones thereof.

11. (Currently Amended) A liquid crystal display device according to claim ~~[[9]]~~10, wherein the display control device detects a timing for transmitting ~~the ineffective~~ a display datum to be transmitted to the output terminal being not connected to the drain lines and transmits ~~[[the]]~~ a effective display datum being read out from either of the first and second storing means as the ineffective display datum to be transmitted to the output terminal being not connected to the drain lines.

12. (Currently Amended) A liquid crystal display device according to claim 10, wherein the display control device stores ~~the effective~~ in the first storing means a display datum to be transmitted to an output terminal of said ~~for the even numbered driving circuit and~~ being not connected to the drain lines ~~situated before the ineffective display datum is transmitted to the output terminal being not connected to the drain lines in the first~~

~~storing means, when a display datum to be stored in the first storing means is ineffective,~~
and

the display control device stores in the second storing means a display datum to be transmitted to an output terminal of said odd numbered driving circuit and being not connected to the drain lines before the display datum is transmitted to the output terminal being not connected to the drain lines.

13. (Currently Amended) A liquid crystal display device according to claim 8, wherein ~~in the embodiments of the present invention,~~ the display control device detects the timing for transmission timing of the ineffective display datum to be transmitted to said output terminal being not connected to the gain lines by counting clock signals being transmitted to the plurality of the driving circuits.

14-16. (Cancelled)

17. (New) A display device according to claim 11, wherein the display control device detects the timing for transmission of the display datum to be transmitted to said output terminal being not connected to the gain lines by counting clock signals being transmitted to the plurality of the driving circuits.

18. (New) A liquid crystal display device according to claim 7, wherein the display control device transmits to said output terminal being not connected to the drain lines a display datum having a same level as that of a display datum being transmitted to an output terminal being connected to one of the drain signal lines.

19. (New) A display device according to claim 10, wherein the display control device transmits to said output terminal being not connected to the drain lines a display datum having a same level as that of a display datum being transmitted to an output terminal being connected to one of the drain signal lines.